Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method, comprising:

applying a laser beam to a layer of ~~first~~ material including a bottom surface disposed on a layer of ~~second material~~ metal, wherein the laser beam penetrates beyond the ~~first~~ material and into the ~~second material~~ metal, to diffuse a portion of the ~~first~~ material into the ~~second material~~ metal to form an electrically conductive trace including an alloy of the first material and the metal, wherein the alloy is formed entirely below the bottom surface of the layer of ~~first~~ material; and

removing non-diffused portions of the layer of material by chemical mechanical polishing.

2. (previously presented) The method of claim 1, wherein:

the laser beam is provided by one of a YAG laser, a CO2 laser, or an infrared laser.

3. (canceled)

4. (currently amended) The method of claim ~~3~~ 1, wherein:

the ~~first~~ material includes tin, the ~~second material~~ metal includes copper, and the electrically conductive trace includes a copper tin alloy.

5. (currently amended) The method of claim ~~3~~ 1, wherein:

the laser beam has a width between about 2 mils and about 8 mils.

6-10 (cancelled)

11. (previously presented) A method comprising:

forming a metal layer on a core;

placing a diffusion layer on the metal layer;

applying photo-thermal energy via laser beam to the diffusion layer to diffuse a portion of the diffusion layer into the metal layer, wherein the laser beam penetrates beyond the diffusion layer and into the metal layer; and

removing non-diffused portions of the diffusion layer by chemical mechanical polishing.

12-27 (cancelled)

28. (currently amended) The method of claim 1, wherein:

the laser beam causes a portion of the ~~second material~~ metal to ablate into a plasma.

29. (previously presented) The method of claim 1, wherein:

the laser beam is provided by a laser programmed to pattern a desired pattern of electrically conductive traces.

30. (canceled)

31. (previously presented) The method of claim 11, wherein:

the metal layer comprises copper and the diffusion layer comprises at least one of an organic material, a polymer epoxy, or an organic metal.

32-34 (canceled)

35. (previously presented) The method of claim 11, further comprising:

removing non-diffused portions of the metal layer.

36. (previously presented) The method of claim 11, wherein:

the metal layer includes copper and the diffusion layer includes tin.

37. (new) The method of claim 11, wherein the metal layer has a thickness in the range of about 5 to 20 microns.

38. (new) The method of claim 11, wherein the diffusion layer has a thickness in the range of about 0.01 to 0.5 microns.

39. (new) The method of claim 11, further comprising:

forming a circuit layer over the core; and

securing a die to the core.

40. (new) A method comprising:

applying a laser beam to a layer of first material on a layer of second material, wherein the laser beam penetrates beyond the first material and into the second material, to diffuse a portion of the first material into the second material; and

removing non-diffused portions of the first material by chemical mechanical polishing.

41. (new) The method of claim 40, wherein the layer of first material comprises a diffusion layer and the layer of second material comprises a metal.

42. (new) The method of claim 40, further comprising:

forming the layer of first material over a package core; and

forming the layer of second material over the layer of first material.

43. (new) The method of claim 42, wherein the package core comprises at least one of ceramic, fiber-reinforced epoxy, or copper clad.

44. (new) The method of claim 42, wherein diffusing the portion of the first material into the second material forms a conductive trace.

45. (new) The method of claim 44, further comprising:

forming a circuit layer over the conductive trace;

forming a bond pad over the circuit layer; and

securing a die to the bond pad by a bump.